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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,199	12/29/2000	Dean Throop	40921/250098	8124

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SUITE 200 GENERATION PLAZA
1822 N.C. HIGHWAY 54 EAST
DURHAM, NC 27713

EXAMINER

SCHNEIDER, JOSHUA D

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/752,199	Applicant(s) THROOP, DEAN	
	Examiner Joshua D Schneider	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


FRITZ FLEMING
PRIMARY EXAMINER
GROUP 2100

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. With regards to claims 2 and 14, Applicant claims structuring the field of the SCSI request in a manner substantially the same as a direct SCSI request. It is unclear to what the limitation substantially refers. It would seem that it is more than just maintaining the structure of the SCSI protocol, as that is a minimal requirement of calling the request a SCSI request. Also there are various SCSI protocols, including iSCSI for sending SCSI over TCP/IP. It remains unclear how the request could be altered to something other than something within the scope of this well known protocol, and still be referred to as a SCSI request.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2182

5. Claims 1, 2, 6-14, and 17-23 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,697,895 to Sherritt et al. With regards to claims 1 and 13, Sherritt teaches the a method of transmitting requests to a target device, comprising: establishing a direct TCP/IP connection between a computer system and a target device (column 2, lines 30-33, and column 3, lines 59-67); encoding a SCSI request with a tag identifying the request as a SCSI request (column 2, lines 33-38), and structuring the request with a request IP/ID (column 8, lines 16-49); sending the tagged SCSI request to the target device (column 2, lines 33-38); returning the request IP/ID of the SCSI request from the target device to the computer system (column 2, lines 33-52).

6. With regards to claims 2 and 14, Sherritt teaches structuring the field of the SCSI request in a manner substantially the same as a direct SCSI request from a host system to a target device (column 8, lines 16-49).

7. With regards to claims 6, 8, 17, and 19, Sherritt teaches the target device is a storage system (see abstract).

8. With regards to claims 7, 9, 18, 20, and 23, Sherritt teaches a server connected to the storage system through SCSI cable, a workstation connected to the server, and further comprising the workstation directly connected to the storage system for establishing the TCP/IP connection with the storage system (column 8, lines 16-49). Sherritt teaches server client relationship establishment (column 1, line 50, through column 2, line 5). This relationship is also inherent to the connection establishment under the TCP portion of the TCP/IP protocol.

9. With regards to claims 10 and 21, Sherritt inherently teaches denying a connection from the workstation to the target device if a request from the workstation does not include a recognized IP/ID (inherent to TCP portion of the TCP/IP protocol).

10. With regards to claims 11 and 22, Sherritt inherently teaches denying a connection from the computer system to the target device if the time for reading a completed message exceeds a predetermined amount of time (inherent to TCP portion of the TCP/IP protocol).

11. With regards to claim 12, Sherritt teaches a direct connection is established on a network separate from a SCSI cable connection between the host system and the target device (see abstract and Fig. 3).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 3-5, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,697,895 to Sherritt et al.

14. With regards to claims 3 and 15, Sherritt teaches sending SCSI request over an Ethernet connection using the TCP/IP protocol. Sherritt fails to explicitly teach the encoding including a data buffer containing data to allow the target device to read the data buffer using the established TCP/IP connection. However, it was notoriously well known in the art at the time of invention that receive and transmit buffers were used in popular commercially available Ethernet chips. It

would have been obvious to one of ordinary skill in the art to use transmit and receive Ethernet buffering to facilitate SCSI transfers over a TCP/IP protocol.

15. With regards to claim 4, Sherritt teaches sending SCSI request over an Ethernet connection using the TCP/IP protocol. Sherritt also teaches sending the data in conjunction with the SCSI request in a manner substantially different from direct SCSI requests from a host system to a target device, and which allows the host system to supply the data buffer without an explicit request from the target system, whereby the target system is allowed to receive the data immediately following the request without having to make an explicit request to obtain the data buffer (column 3, lines 11-35). Sherritt fails to explicitly teach a data buffer. However, it was notoriously well known in the art at the time of invention that receive and transmit buffers were used in popular commercially available Ethernet chips. It would have been obvious to one of ordinary skill in the art to use transmit and receive Ethernet buffering to facilitate SCSI transfers over a TCP/IP protocol.

16. With regards to claims 5 and 16, Sherritt teaches sending SCSI request over an Ethernet connection using the TCP/IP protocol. Sherritt fails to explicitly teach returning a data buffer generated by the target device to the workstation using the established TCP/IP connection. However, it was notoriously well known in the art at the time of invention that receive and transmit buffers were used in popular commercially available Ethernet chips. It would have been obvious to one of ordinary skill in the art to use transmit and receive Ethernet buffering to facilitate SCSI transfers over a TCP/IP protocol.


Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 5,996,024 to Blemenau teaches sending encapsulated SCSI requests. U.S. Patent 6,658,459 to Kwan et al. teaches sharing peripheral devices over a network. U.S. Patent 6,738,821 to Wilson et al. teaches the use data transfer requests over a network protocol. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D Schneider whose telephone number is (571) 272-4152. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDS


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GROUP 2100